

DISCUSSION OF THE CLAIMS

Claims 1-2, 4, 7-13, 18-19, 26, 28-29 and 31 are active in the present application. Claims 2 and 31 are amended. Support for the amendment is found on page 8 [0013]. Claims 3, 5-6, 14-17, 20-25, 27 and 30 are canceled claims. Claims 8-11 are presently withdrawn from prosecution.

### REMARKS/ARGUMENTS

Applicants thank Examiner O'Hern for the helpful and courteous discussion of April 12, 2009. During the discussion Applicants' U.S. representative argued that areas such as islands of an outer surface of a substrate may be uncovered with grooves.

Applicants thank the Office for withdrawing the rejection of the claims over art as set forth in the Office Action of September 17, 2008. The Office now asserts that the claims are indefinite under the meaning of 35 U.S.C. § 112, second paragraph. The Office appears to object to the term "covered" recited in Claims 1 and 7. Applicants submit that the term "covered" is readily recognized by those of skill in the art reading the disclosure of the present specification. For example, page 8 of the present specification describes an embodiment of the invention in which "10% of the whole outer surface of the silica glass crucible is covered with fine grooves." The term "covered" as it appears in the present claims and as it appears in the present specification means exactly what it says; namely, grooves cover at least a portion of an outer surface of a silica glass crucible.

Applicants submit that the term "covered" as it is used in the present application is no different than when applied to the silica glass crucible of the present claims. This is demonstrated from a simple comparison with the use of the word "covered" to describe a painted substrate. A surface that is covered with a paint has the paint present on those portions of the substrate that are in direct contact with the paint. Those portions of a painted substrate that are not in contact with the paint are not covered with the paint.

The same applies for the covered surface of the crucible of the presently claimed invention. The portions of the surface of the glass crucible that are covered with fine grooves have grooves present thereon. Those portions of the glass crucible that are not covered with fine grooves do not have fine grooves.

The Office appears to be urging an interpretation of the claims that makes no technical sense. For example, the Office appears to be of the belief that side-by-side grooves define a “space between the grooves” that is not covered by grooves. Applicants submit that it is evident that grooves cannot exist in a side-by-side fashion without a ridge or projecting area that defines the depth of the groove. If such a projecting portion did not exist, no groove could be defined.

In paragraph no. 4 on page 2 of the March 18 Office Action, the Office appears to assert that the term “an outer space” appears in the language of the present claims. Applicants submit that the term “an outer space” does not appear in Claims 1 and 7. The Office’s rejection of the claims is traversed to the extent the Office bases the rejection on a term that does not appear in the present claims.

The Office further objects to terms in dependent Claims 2 and 31. Again the Office appears to take the position that a surface of a silica crucible that defines a projecting portion of a groove may be an un-grooved portion of the surface of the crucible. As explained above, such an interpretation does not make sense with respect to the word “covered”.

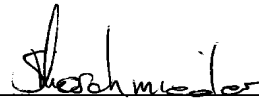
Dependent Claims 2, 29 and 31 are amended herein to recite that the grooves exist on a certain portion of “the whole outer surface of the crucible.” Claim 7 is likewise amended.

With respect to paragraph no. 6 on page 3 of the March 18 Office Action, Applicants point out that independent Claims 1 and 7 provide an antecedent basis for the term “outer surface”. Applicants submit that dependent Claims 2 and 31 make it clear that the grooves of Claims 1 and 7 may cover only a portion of the outer surface of the crucible. Applicants submit there is no ambiguity with respect to this interpretation of the claims.

For the reasons discussed above in detail, Applicants submit that withdrawal of the rejection is appropriate. Applicants respectfully request withdrawal of the rejections and the allowance of all now-pending active claims.

Respectfully submitted,

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